

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007338**Date Inspected:** 20-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wen pang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

**BAY 1**

This QA Inspector observed the following work in progress:

SAW process welding of weld joint #002 located on Cross Beam CB201C - 007. Welder is identified as 207345. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2C – S – 2.

**BAY 2****Ultrasonic Testing**

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. SSD19 – PP091 – 137
2. FB003 – 171 – 034, 046
3. SSD17A – PP087 – 131
4. FB003 – 169 – 008, 020

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5. SSD19 – PP090 – 137
6. FB003 – 160 – 034, 046
7. SSD19 – PP089 – 136
8. FB003 – 176 – 034, 046
9. SSD16A – PP092 – 131
10. FB003 – 162 – 032, 008
11. SSD16 – PP086 – 006
12. FB003 – 161 – 034, 046

### BAY 3

#### Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. FB013 – 043 – 044 – Green Tag # 009099
2. FB010 – 034 – 043

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #097 located on CSD6 – PP84. Welder is identified as 204338. ZPMC QC is identified as Zhang Yaxu. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #043 located on Floor Beam FB012 – 038. Welder is identified as 044824. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – u4b - F.

FCAW process welding of weld joint #011 located on Floor Beam FB012 – 038. Welder is identified as 208035. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

### BAY 5

#### Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. FB204 – 029 – 015; 012; 043; 034
2. FB204 – 030 – 006; 018; 040; 031
3. FB204 – 031 – 024; 012; 046; 025
4. FB204 – 032 – 006; 024; 043; 034
5. FB205 – 029 – 009; 019
6. FB205 – 030 – 006; 019
7. FB205 – 031 – 005; 013

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8. FB205 – 032 – 005; 022

BAY 7

### Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. BP3001 – 001 – 003; 004; 027; 031
2. BP3002 – 001 – 005; 006; 035; 039
3. BP3003 – 001 – 001; 002; 019; 023

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #018 located on SP3007 – 001. Welder is identified as 203204. ZPMC QC is identified as Zhong Dian Xing. The welding variables recorded by QC appeared to comply with the WPS – B – P - 2112.

BAY 8

This QA Inspector observed the following work in progress:

SAW process welding of weld joint #004 located on Cross Beam CB201B- 012. Welder is identified as 207463. ZPMC QC is identified as Guo Yan Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2C – S – 2.

FCAW process welding of weld joint #024 located on Floor Beam FB204 – 034. Welder is identified as 066687. ZPMC QC is identified as Guo Yan Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – u4b – F – 1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

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| <b>Inspected By:</b> | Kumar,Sandeep | Quality Assurance Inspector |
| <b>Reviewed By:</b>  | Prue,Erik     | QA Reviewer                 |

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